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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,280	07/08/2003	Gilbert Wolrich	10559-139002	8226

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EXAMINER	
NGUYEN, PHUOC H	

ART UNIT	PAPER NUMBER
2143	

DATE MAILED: 09/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/615,280	WOLRICH ET AL.	
	Examiner	Art Unit	
	Phuoc H. Nguyen	2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12,16-19, and 22-26* is/are rejected.

7)☒ Claim(s) *13-15,20,21,27 and 28* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-15, and 22-28 of the instant application are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over some claims of U.S. Patent No. 6,625,654.

3. Regarding claim 1 of U.S. Patent No. 6,625,654 contains every element of claims 1,4, and 10-13 of the instant application and as such anticipate claims 1,4, and 10-13 of the instant application.

4. Regarding claim 2 of U.S. Patent No. 6,625,654 contains every element of claim 2 of the instant application and as such anticipate claim 2 of the instant application.

5. Regarding claim 3 of U.S. Patent No. 6,625,654 contains every element of claim 3 of the instant application and as such anticipate claim 3 of the instant application.

6. Regarding claim 4 of U.S. Patent No. 6,625,654 contains every element of claim 5 of the instant application and as such anticipate claim 5 of the instant application.

7. Regarding claim 5 of U.S. Patent No. 6,625,654 contains every element of claim 6 of the instant application and as such anticipate claim 6 of the instant application.

8. Regarding claim 6 of U.S. Patent No. 6,625,654 contains every element of claim 7 of the instant application and as such anticipate claim 7 of the instant application.

9. Regarding claim 7 of U.S. Patent No. 6,625,654 contains every element of claim 8 of the instant application and as such anticipate claim 8 of the instant application.

10. Regarding claim 8 of U.S. Patent No. 6,625,654 contains every element of claim 9 of the instant application and as such anticipate claim 9 of the instant application.

11. Regarding claim 10 of U.S. Patent No. 6,625,654 contains every element of claim 14 of the instant application and as such anticipate claim 14 of the instant application.

12. Regarding claim 9 of U.S. Patent No. 6,625,654 contains every element of claim 15 of the instant application and as such anticipate claim 15 of the instant application.

13. Regarding claim 11 of U.S. Patent No. 6,625,654 contains every element of claims 22 and 27 of the instant application and as such anticipate claims 22 and 27 of the instant application.

14. Regarding claim 12 of U.S. Patent No. 6,625,654 contains every element of claim 23 of the instant application and as such anticipate claim 23 of the instant application.

15. Regarding claim 13 of U.S. Patent No. 6,625,654 contains every element of claim 24 of the instant application and as such anticipate claim 24 of the instant application.

16. Regarding claim 14 of U.S. Patent No. 6,625,654 contains every element of claim 25 of the instant application and as such anticipate claim 25 of the instant application.

17. Regarding claim 15 of U.S. Patent No. 6,625,654 contains every element of claim 26 of the instant application and as such anticipate claim 26 of the instant application.

18. Regarding claim 16 of U.S. Patent No. 6,625,654 contains every element of claim 28 of the instant application and as such anticipate claim 28 of the instant application.

"A later patent claim is not patentably distinct from an earlier patent claim if the later claim is obvious over, or **anticipated by**, the earlier claim. In re Longi, 759 F.2d at 896, 225 USPQ at 651 (affirming a holding of obviousness-type double patenting because the claims at issue were obvious over claims in four prior art patents); In re Berg, 140 F.3d at 1437, 46 USPQ2d at 1233 (Fed. Cir. 1998) (affirming a holding of obviousness-type double patenting where a patent application claim to a genus is anticipated by a patent claim to a species within that genus). " ELI LILLY AND COMPANY v BARR LABORATORIES, INC., United States Court of Appeals for the Federal Circuit, ON PETITION FOR REHEARING EN BANC (DECIDED: May 30, 2001).

Claim Rejections - 35 USC § 103

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

20. Claims 1-12,16-19, and 22-26 rejected under 35 U.S.C. 103(a) as being unpatentable over anticipated by Kahle et al (Hereafter, Kahle), U.S. Pat. No. 6,212,542 in view of Chang et al (Hereafter, Chang), U.S. Pat. No. 6,338,078.

21. Regarding claims 1,16, and 22, Kahle teaches a method for packet (eg. data) processing (col. 4, lines 26-28) comprising operating on the packets (eg. data) with plurality of program threads to affect processing of the packets (Abstract; Figure 4; col. 10, lines 25-56).

Kahle does not explicitly teach the packet is receiving from the network. However, Kahle does suggest that the Kahle's invention can be implemented as a computer program product for use with a data processing system, such as computer network (col. 27, lines 8-22).

Chang, in the same field of data processing, discloses a packet, which is received from the network (Abstract). It would have been obvious to one of ordinary skill in the art at the time of invention was made to incorporate a Chang's teaching into Kahle's method to process a network packet to improve network throughput and take advantage of Multiple processors scalability.

22. Regarding claims 2,3, and 23, Kahle further teaches using at least one program thread to inspect a header portion of the packet, and signaling by the at least one program thread that a packet header has been processed (col. 11, lines 29-33).

23. Regarding claims 4 and 24, Kahle further teaches the plurality of program threads are scheduler program threads to schedule task orders for processing and processing program threads that process packets in accordance with task (eg. instructions) assignments assigned by the scheduler program threads (col. 11, lines 35-41).

24. Regarding claims 5 and 25, Kahle further teaches each program thread writes a message to a register that indicates its current status (col. 11, lines 26-34).

25. Regarding claims 6 and 19, Kahle further teaches interpretation of the message is fixed by a software convention determined between a scheduler program thread and processing program threads called by the scheduler program thread (Figure 4).

26. Regarding claims 7 and 8, Kahle further teaches status messages include busy, not busy, not busy but waiting; and a status message includes not busy, but waiting and wherein the status of not busy, but waiting signals that the current program thread has completed processing of a portion of a packet and is expected to be assigned to perform a subsequent task on the packet when data is made available to continue processing of the program thread (col. 11, lines 23-34; col. 14, lines 45-52; and col. 15, lines 49-60).

27. Regarding claims 9,18, and 26, Kahle further teaches the register is a globally accessible register that can be read from or written to by all current program threads (col. 14, last paragraph; col. 14, 2nd paragraph; and col. 19, lines 18-24).

28. Regarding claims 10 and 17, Kahle further teaches scheduler program threads can schedule any one of a plurality of processing program threads to handle processing of a task (col. 14, lines 16-20).

29. Regarding claim 11, Kahle further teaches the scheduler program thread writes a register with an address corresponding to a location of data for the plurality of processing program threads (col. 20, lines 14-32).

30. Regarding claim 12, Kahle further teaches a selected one of the plurality of processing program threads that can handle the task reads the register to obtain the location of the data (col. 27, lines 55-63.

Allowable Subject Matter

31. Claims 13-15,20-21, and 27-28 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Other References Cited

32. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ramakrishnan et al. U.S. Patent 6,085,215 discloses scheduling mechanism using predetermined limited execution time processing threads in communication network.

Kikuchi et al. U.S. Patent 6,463,480 discloses a method and system of processing a plurality of data processing requests, and method and system of executing a program.

Eickemeyer et al. U.S. Patent 6,061,710 discloses multithreaded processor incorporating a thread latch register for interrupt service new pending threads.

Guedalia et al. U.S. Patent 6,535,878 discloses method and system for providing on-line interactivity over a server-client network.

Kirshenbaum et al. U.S. Patent 5,918,235 disclose object surrogate with active computation and probabilistic counter.

Chan U.S. Patent 6,466,898 discloses multithreaded, mixed hardware description languages logic simulation on engineering workstations.

Conclusion

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS ACTION IS SET TO EXPIRE THREE MONTHS, OR THIRTY DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. FAILURE TO RESPOND WITHIN THE PERIOD FOR RESPONSE WILL CAUSE THE APPLICATION TO BECOME ABANDONED (35 U.S.C. § 133). EXTENSIONS OF TIME MAY BE OBTAINED UNDER THE PROVISIONS OF 37 CAR 1.136(A).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuoc H. Nguyen whose telephone number is 703-305-5315. The examiner can normally be reached on Mon -Thu (7AM-4: 30PM) and off every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A Wiley can be reached on 703-308-5221. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phuoc H. Nguyen
Examiner
Art Unit 2143

DAVID WILEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

August 26, 2004